

# ABSTRACT OF THE DISCLOSURE

A method and apparatus for synchronizing time of day (TOD) information between radio nodes of a network and for detecting and merging otherwise isolated radio networks. In this manner individual isolated networks are able start when they are ready and once connectivity is detected with another network, the two networks can merge. Radio nodes within each network periodically send out TOD messages and periodically receive TOD messages issued by other nodes look to identify networks within communication range. Upon detecting another network a radio node informs a central control node that uses network detection information received from its members to determine the extent of the connectivity between the two networks and whether to merge the two networks. Network searching is optimized to limit impact on the overall network performance, resulting in little or no degradation in network performance.